



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,206	02/26/2002	Jia-Hua Fan	1761006	8015

7590 06/01/2004

Keith Kline
PRO-TECHTOR INTERNATIONAL SERVICES
20775 Norada Court
Saratoga, CA 95070-3018

EXAMINER

TRAN, TUAN A

ART UNIT	PAPER NUMBER
----------	--------------

2682

2

DATE MAILED: 06/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/085,206

Applicant(s)

FAN, JIA-HUA

Examiner

Tuan A Tran

Art Unit

2682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Objections

Claim 1 is objected to because of the following informalities: The term "the general circuit" should be changed to "the central circuit". Appropriate correction is required.

Claim 2 is objected to because of the following informalities: The term "the household DC and car lighter DC" should be changed to "household DC or car lighter DC". Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shih (5,982,149) in view of Chen (2002/0090983).

Regarding claims 1-3, Shih discloses a mobile phone charger 1 charged by AC or DC electricity sources such as car lighter DC (See fig.1 and Abstract, col. 4 line 6) wherein the charger can be used to charge mobile phone battery, that provides a central circuit and the electricity sources in the charger connecting to mobile phone battery (See figs. 1-2 and col. 2 lines 42-65), wherein the central circuit transform and

Art Unit: 2682

transmits the electricity of the electricity sources to the mobile phone battery (See figs. 3-4 and col. 2 line 66 to col. 3 line 41) and comprises: a DC electricity source; a charger circuit and charge loop H, K, L for transmitting electricity to the mobile phone battery (See figs. 3-4 and col. 2 line 66 to col. 3 line 41); and a circuit protector H, I for disconnecting the charging automatically as soon as the mobile phone battery is fully charged in order to protect the mobile phone battery from being over-charged and damaged (See figs. 3-4 and col. 2 line 66 to col. 3 line 41). However, Shih does not mention that the central circuit comprises a DC voltage stabilizer and the charger charged by battery. Since battery is known as an electricity source (DC source) and Chen teaches a mobile phone charger comprising a circuit (See fig. 3) that transforms and transmits electricity of the electricity source to the mobile phone battery wherein a DC voltage stabilizer is connected between the DC electricity source and the charging circuit (See fig. 3 and page 2 [0021]); therefore it would have been obvious to one of ordinary skill in the art to use battery as an electricity source of the charger in order to provide the users another option to recharge their mobile phones when other electricity sources are not available, and further to apply the teachings of Chen in modifying the central circuit as disclosed by Shih with the DC voltage stabilizer for the advantage of eliminating ripple components of the voltage in order to provide a stabilized DC voltage.

Regarding claim 4, Shih & Chen disclose as cited in claim 1. However, they do not mention that the changer can be connected to the mobile phone directly or via a signal line. Official Notice is taken that directly/indirectly (via signal line) charging connection between the charger and the mobile phone is common in the art, therefore it

Art Unit: 2682

would have been obvious to one of ordinary skill in the art to modify the charger as disclosed by Shih & Chen such that it can be connected directly or via the signal line to the mobile phone for the advantage of giving the user higher degree of freedom in positioning the mobile phone needed to be recharged.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Matsuo (US 6,526,293); Sakai et al. (US 2002/0033692); Fukuoka et al. (US 6,465,984).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tuan Tran** whose telephone number is **(703) 605-4255**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Vivian Chin**, can be reached at **(703) 308-6739**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

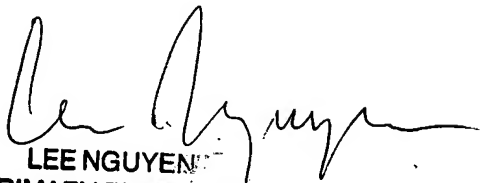
Art Unit: 2682

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



Tuan Tran

AU 2682



LEE NGUYEN
PRIMARY EXAMINER